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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAJIV DAYAL and FREDRICK W. MAU II

Appeal 2020-000535 Application 15/052,495 Technology Center 3600

Before BRETT C. MARTIN, JILL D. HILL, and CARL M. DEFRANCO, *Administrative Patent Judges*.

MARTIN, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 7–10 and 14. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Toyota Motor Engineering & Manufacturing North America, Inc. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed "to a vision-assist apparatus that communicates with a guide animal." Spec. ¶ 1. Claim 7, reproduced below, is illustrative of the claimed subject matter:

7. A system for communicating with a guide animal, comprising:

a first output device that provides a first output type that is perceptible by a vision-impaired user;

a second output device that outputs a second output type that is imperceptible by the vision-impaired user but is perceptible by the guide animal utilized by the vision-impaired user; and

a vision-assist computing device comprising a processor and a memory component, the memory component storing logic that causes the vision-assist computing device to perform at least the following:

determine instructions to a destination;

determine a first command to provide to the visionimpaired user to proceed to the destination;

determine a second command to provide to the guide animal to correspond with the first command;

provide the first command via the first output device; and provide the second command via the second output device.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Golden	US 8,955,462 B1	Feb. 17, 2015
Kulyukin	US 2007/0018890 A1	Jan. 25, 2007

REJECTION

Claims 7–10 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over Golden and Kulyukin. Final Act. 2–3.

OPINION

Obviousness

The Examiner rejects the claims over the combination of Kulyukin and Golden. Final Act. 2. The Examiner finds that Kulyukin teaches the claimed first command for the human, and that Golden teaches the claimed second command for the guide animal corresponding to the first command. *Id.* at 3. The Examiner concludes that "it would have been obvious to one of ordinary skill in the art to take the device of Kulyukin and add the guide animal also receiving commands related to positioning the guide animal as disclosed by Golden." *Id.*

Appellant provides two main arguments against the Examiner's combination. First, Appellant asserts that Golden's dynamic boundary does not amount to the issuance of any command as recited in the claims. Reply Br. 5. This is so because Golden teaches, essentially, a moving geofence around the guide animal that urges the animal to move in a chosen direction. Thus, Golden does not issue commands, instead adjusting "the boundary such that the animal must move or be shocked." Reply Br. 6. Appellant next argues that the combination also fails to teach "corresponding two different commands." *Id.* Appellant is correct on this point because neither reference contemplates coordinating the two sets of commands. Each prior art reference is concerned with guiding only one of the two entities — Kulyukin the human and Golden the guide animal.

As to Appellant's first argument, we generally agree that Golden's virtual leash is not the same as providing a *corresponding* command. As the Specification explains, a "command may include an instruction, such as a right turn instruction, a left turn instruction, a stop instruction, a proceed instruction, and/or other instructions." Spec. ¶ 26. The Specification goes

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on to explain that "the second command may communicate similar information as the first command" such that "if the instructions include a command to take a left turn, the user may be provided with the first command" and "the second command may convey the same information to the guide animal." Spec. ¶ 27. In this sense, both the user and the guide animal receive the same command, thus, there is correspondence between the two commands.

Golden, however, does not teach any discrete command as described in the Specification. Essentially, Golden does not teach a specific command, but provides a shock to the animal if it is not in the geofence of the virtual leash. In this manner, Golden teaches prohibiting the animal from moving in certain directions, as opposed to providing a command for it to move to a desired location. Ultimately, the combination of Kulyukin and Golden could result in both the human and the guide animal reaching the same destination, but this is not done with corresponding commands as claimed. The combination would, at best, provide a human with a set of commands about where to go, and then provide a moving geofence creating a set of commands about where the dog should not go.

An easy example to illustrate how these do not correspond is that the user may receive a command to turn left. The guide animal, however, receives no command and could actually turn right until it reaches the geofence boundary and is urged to move in another direction. All the guide animal knows is that it is now located in a prohibited area and that it must move in some way to return to the desired area. The guide animal could move in a number of directions before ultimately realizing that it generally needs to move left to follow the human. In the claimed system, both the human user and the guide animal would receive commands to turn left and

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so the commands would thus correspond. Because we do not agree that the Examiner's combination teaches the claimed *corresponding* first and second commands, we do not sustain the rejection.

CONCLUSION

The Examiner's rejection is REVERSED.

More specifically:

DECISION SUMMARY

	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
Rejected				
7–10, 14	103	Golden, Kulyukin		7–10, 14

REVERSED